

Title (en)
METHOD AND SYSTEM FOR SEPARATING PLURALITY OF ACOUSTIC SIGNALS GENERATED BY PLURALITY OF ACOUSTIC SOURCES

Title (de)
VERFAHREN UND SYSTEM ZUR TRENNUNG VON MEHREREN AKUSTISCHEN SIGNALEN ERZEUGT DURCH EINE MEHRZAHL
AKUSTISCHER QUELLEN

Title (fr)
PROCEDE ET SYSTEME POUR SEPARER UNE PLURALITE DE SIGNAUX ACOUSTIQUES GENERES PAR UNE PLURALITE DE SOURCES
ACOUSTIQUES

Publication
EP 1568013 B1 20070307 (EN)

Application
EP 03789598 A 20031211

Priority
• JP 0315877 W 20031211
• US 31871402 A 20021213

Abstract (en)
[origin: US2004117186A1] A method separates acoustic signals generated by multiple acoustic sources, such as mixed speech spoken simultaneously by several speakers in the same room. For each source, the acoustic signals are combined into a mixed signal acquired by multiple microphones, at least one for each source. The mixed signal is filtered, and the filtered signals are summed into a signal from which features are extracted. A target sequence through a factorial HMM is estimated, and filter parameters are optimized accordingly. These steps are repeated until the filter parameters converge to optimal filtering parameters, which are then used to filter the mixed signal once more, and the summed output of this last filtering is the acoustic signal for a particular acoustic source.

IPC 8 full level
G10L 21/0308 (2013.01)

CPC (source: EP US)
G10L 21/028 (2013.01 - EP US)

Citation (examination)
SELTZER M.L. ET AL: "SPEECH RECOGNIZER-BASED MICROPHONE ARRAY PROCESSING FOR ROBUST HANDS-FREE SPEECH RECOGNITION", ICASSP 2002, ORLANDO (USA), 13-17 MAY 2002, 13 May 2002 (2002-05-13), pages 897 - 900, XP010804915

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